Name:

*Mr. Tiénou-Gustafson & Mr. Bielmeier*

Geometry, Period

Due Date: Thu, 12 Mar 2015

**Geometry**

**Homework**



***Right Triangle Test Tomorrow!!!***

*Hint: this will be on the test!*

|  |  |  |  |
| --- | --- | --- | --- |
| **Method:** | **Goal:** | **Required:** | **Analysis:** |
| **Pythagorean Theorem** |  |  |  |
| **Pythagorean triples** *(Give at least 2 – bonus if you give first 4)* |  |  |  |
| **Special right triangle ratios** (give both) |  |  |  |
| **Trig ratios** |  |  |  |
| **Inverse trig** |  |  |  |

***Write your own example problem for each and solve. Show all work.***

1. Pythagorean Theorem (to find a leg)
2. Pythagorean triples (use a multiple of one of the triples you know)
3. Special right triangles (give an example of both; start with the measure of the hypotenuse in each)
4. Trig ratios (to find a missing side)
5. Inverse trig ratios (to find an angle)
6. Use the right triangle below to answer the questions:

|  |  |  |  |
| --- | --- | --- | --- |
|  | A) Write a ratio for the cosine of ∠R: | B) Find the length of side QP: | C) Find the measure of ∠P: |

1. Fill in the table with the appropriate values for each of the given triangles.

|  |  |  |  |
| --- | --- | --- | --- |
| ***Side:*** |  |  |  |
| ***Ratio:*** |  |  |  |
| ***Value*** *for this triangle:* |  |  |  |

60**°**

30**°**

42

1. Use trig to find one of the missing side lengths, then the Pythagorean theorem to find the other side. Round to the nearest whole number.

19**°**

37 ft

1. Find the area and perimeter of the triangle above.